- 1 1. A stormwater treatment system which comprises:
- a housing having a first aperture positioned downstream of a second aperture;
- a first filter layer and a second filter layer positioned within the housing; and
- a separator layer disposed between the first filter layer and the second filter layer,
- 5 the first filter layer absorbing contaminants from stormwater to produce a first treated
- 6 stormwater having an effluent concentration that meets the USEPA Water Quality
- 7 Criteria and the second filter layer having a controlled pH within a range of between
- 8 about 9-11 to precipitate substantially all of the dissolved contaminants remaining in the
- 9 first treated stormwater when the stormwater flows into the first aperture, permeates
- through the first filter layer, the separator layer and the second filter layer and flows out
- of the second aperture.
- 1 2. The stormwater treatment system of claim 1 wherein the first filter layer is
- 2 comprised of granular activated carbon.
- 1 3. The stormwater treatment system of claim 2 wherein the second filter layer is
- 2 crushed concrete comprising CaO.
- 1 4. The stormwater treatment system of claim 3 wherein the crushed concrete is
- 2 chemically configured to induce chemical precipitation reactions of substantially all of
- 3 the dissolved contaminants remaining in the first treated stormwater.
- 1 5. The stormwater treatment system of claim 3 wherein the separator is comprised
- 2 of a geosynthetic material.

- 1 6. The stormwater treatment system of claim 5 wherein the contaminants are
- 2 selected from the group consisting of phosphorous, cadmium, chromium, copper, lead
- 3 and zinc.
- 7. The stormwater treatment system of claim 6 which further comprises:
- a gravel filter bed positioned on the bottom of the housing.
- 1 8. The stormwater treatment system of claim 7 wherein the housing is cement and
- 2 further comprises a casing, the casing having a sampling port.
- 9. A method for treating stormwater runoff which comprises:
- 2 permeating the stormwater through a first medium to produce a first treated
- 3 stormwater having an effluent concentration that meets the USEPA Water Quality
- 4 Criteria; and
- flowing the first treated stormwater through a second medium comprised of
- 6 crushed concrete having a pH within a range of between about 9-11 to precipitate
- 7 substantially all of the dissolved contaminants remaining in the first treated stormwater.
- 1 10. The method according to claim 9 which further comprises flowing the first treated
- 2 stormwater through a geosynthetic filter material.
- 1 11. The method according to claim 10 wherein the first medium is comprised of
- 2 granular activated carbon.